

*Please provide the following information, and submit to the NOAA DM Plan Repository.*

**Reference to Master DM Plan (if applicable)**

*As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.*

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

**1. General Description of Data to be Managed****1.1. Name of the Data, data collection Project, or data-producing Program:**

Sensitivity of Coastal Environments and Wildlife to Spilled Oil: Puget Sound and Strait of Juan de Fuca, Washington: MGT (Management Area Polygons)

**1.2. Summary description of the data:**

This data set contains polygons that represent the following sensitive human-use management areas in Puget Sound and the Strait of Juan de Fuca, Washington: aquaculture sites, commercial fishing areas, Indian reservations, marine sanctuaries, Nature Conservancy areas, national parks, recreational fishing areas, state parks, subsistence areas, wildlife refuges, and other management areas. Location-specific type and source information is stored in relational data tables (described below) designed to be used in conjunction with this spatial data layer. This data set comprises a portion of the Environmental Sensitivity Index (ESI) data for Puget Sound and Strait of Juan de Fuca, Washington. ESI data characterize the marine and coastal environments and wildlife by their sensitivity to spilled oil. The ESI data include information for three main components: shoreline habitats, sensitive biological resources, and human-use resources. See also the SOCECON (Socioeconomic Resource Points and Lines) data layer, part of the larger Puget Sound and Strait of Juan de Fuca ESI database, for additional human-use information.

**1.3. Is this a one-time data collection, or an ongoing series of measurements?**

One-time data collection

**1.4. Actual or planned temporal coverage of the data:**

1989 to 2006

**1.5. Actual or planned geographic coverage of the data:**

W: -124.751, E: -122.126, N: 49, S: 47

**1.6. Type(s) of data:**

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)  
vector digital data

**1.7. Data collection method(s):**

*(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)*

**1.8. If data are from a NOAA Observing System of Record, indicate name of system:**

**1.8.1. If data are from another observing system, please specify:**

**2. Point of Contact for this Data Management Plan (author or maintainer)**

**2.1. Name:**

ESI Project Lead

**2.2. Title:**

Metadata Contact

**2.3. Affiliation or facility:**

Office of Response and Restoration

**2.4. E-mail address:**

orr.esi@noaa.gov

**2.5. Phone number:**

**3. Responsible Party for Data Management**

*Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.*

**3.1. Name:**

ESI Project Lead

**3.2. Title:**

Data Steward

**4. Resources**

*Programs must identify resources within their own budget for managing the data they produce.*

**4.1. Have resources for management of these data been identified?**

**4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):**

**5. Data Lineage and Quality**

*NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality,*

*objectivity, utility, and integrity of information which it disseminates.*

### **5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible**

*(describe or provide URL of description):*

Process Steps:

- 2006-03-01 00:00:00 - Aquaculture: Digital polygons representing aquaculture facilities were provided by Washington State Department of Health (WDOH) and Washington Department of Fish and Wildlife (WDFW). WDOH's growing areas were included where the class was defined as "approved" or "conditional." Cultured mussels from WDFW's Marine Resource Database were also included as aquaculture sites. In order to depict the aquaculture sites as water-bound polygons, they were clipped with the water portion of the HYDRO layer. Any resulting land-based aquaculture sliver polygons were removed from the MGT layer. Where the polygons appeared to follow the shoreline but fell short, they were extended to meet the shoreline. Commercial and Recreational Fishing: Digital polygons representing commercial fishing and recreational fishing areas were provided by Washington Department of Fish and Wildlife's (WDFW) Marine Resource Database. The following layers were included as commercial and recreational fishing areas: demersal, reef, and pelagic (where demersal, reef and pelagic field = 1, respectively). The salmoncm features were included as commercial fishing areas where the "intense" and "everyone" field = 1. The salmonsp features were included as recreational fishing areas where the "sportsalmo" field = 1. In order to depict the commercial fishing and recreational fishing sites as water-bound polygons, they were clipped with the water portion of the HYDRO layer. Any resulting land-based sliver polygons were removed from the MGT layer. Where the polygons appeared to follow the shoreline but fell short, they were extended to meet the shoreline. Indian Reservations: Digital polygons representing Indian reservation boundaries were provided by the following groups: Jamestown S'klallam Tribe, Lummi Indian Business Council, Makah Tribe, Washington State Department of Ecology (WDOE), and Washington Department of Natural Resources (WDNR). Only those reservation boundaries from WDOE and WDNR that were not already included from the tribal groups were included. Management Areas: Digital polygons representing marine managed areas were provided by NOAA's Marine Protected Area (MPA) Center. Additional marine preservation areas were provided by Washington Department of Fish and Wildlife's (WDFW) Marine Resource Database. Marine Sanctuaries: Digital polygons representing National Estuarine Research Reserve System boundaries were provided by NOAA's MPA Center. The Olympic Coast National Marine Sanctuary (OCNMS) boundary was provided by OCNMS. Nature Conservancy Areas: Digital polygons representing lands managed by The Nature Conservancy were provided by the Washington Chapter of The Nature Conservancy. National Parks: The Olympic National Park boundary was provided by Olympic National Forest as a digital polygon feature. The boundaries of National Historic Parks and Reserves in the study area were provided by Washington Department of Transportation. State Parks: Digital polygons representing state parks were provided by Washington

State Parks and Recreation Commission. Subsistence: Digital polygons representing subsistence areas were gathered from the salmoncm layer provided by WDFW. Only those polygons where the field "treaty" = 1 were included. Wildlife Refuges: Digital polygons representing wildlife refuge boundaries were provided by the Makah Tribe and NOAA's MPA Center.

- 2006-03-01 00:00:00 - The above digital and/or hardcopy sources were compiled by the project biologist to create the MGT data layer. Depending on the type of source data, three general approaches are used for compiling the data layer: (1) information gathered during initial interviews and from hardcopy sources are compiled onto U.S. Geological Survey 1:24,000 topographic quadrangles and digitized; (2) hardcopy maps are digitized at their source scale; (3) digital data layers are evaluated and used "as is" or integrated with the hardcopy data sources. See the Lineage section for additional information on the type of source data for this data layer.

- 2006-05-01 00:00:00 - The compiled ESI, biology, and human-use data are plotted onto hardcopy draft maps. Following the delivery of draft maps to the participating resource experts, a second set of interviews is conducted to review the maps. If necessary, edits to the MGT data layer are made based on the recommendations of the resource experts, and final hardcopy maps and digital data are created.

**5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:**

**5.2. Quality control procedures employed (describe or provide URL of description):**

## 6. Data Documentation

*The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.*

**6.1. Does metadata comply with EDMC Data Documentation directive?**

No

**6.1.1. If metadata are non-existent or non-compliant, please explain:**

Missing/invalid information:

- 1.7. Data collection method(s)
- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed
- 7.1. Do these data comply with the Data Access directive?
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.1.2. If there are limitations to data access, describe how data are protected

- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

**6.2. Name of organization or facility providing metadata hosting:**

NMFS Office of Science and Technology

**6.2.1. If service is needed for metadata hosting, please indicate:****6.3. URL of metadata folder or data catalog, if known:**

<https://inport.nmfs.noaa.gov/inport/item/40618>

**6.4. Process for producing and maintaining metadata**

*(describe or provide URL of description):*

Metadata produced and maintained in accordance with the NMFS Data Documentation Procedural Directive: <http://www.nmfs.noaa.gov/op/pds/documents/04/111/04-111-01.pdf>

**7. Data Access**

*NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.*

**7.1. Do these data comply with the Data Access directive?**

**7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?**

**7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:**

**7.2. Name of organization of facility providing data access:**

Office of Response and Restoration

**7.2.1. If data hosting service is needed, please indicate:****7.2.2. URL of data access service, if known:**

**7.3. Data access methods or services offered:**

Contact NOAA for distribution options (see Distributor). ESI data are processed into multiple formats to make them useful to a wider community of GIS/mapping users. Distribution formats include a Geodatabase; ARC export, MOSS, and Shape files; and MARPLOT map folders. An ArcMap .mxd file, an ArcView 3.x ESI project, and an ESI\_Viewer product are also included on the distribution CDs for ease of use of the ESI data. The database files are distributed both in the NOAA standard relational database format (see NOAA Technical Memorandum NOS ORCA 115) and in a simplified desktop flat file format. This metadata document includes information on both of these database formats.;

**7.4. Approximate delay between data collection and dissemination:**

**7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:**

**8. Data Preservation and Protection**

*The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.*

**8.1. Actual or planned long-term data archive location:**

*(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)*

**8.1.1. If World Data Center or Other, specify:****8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:****8.2. Data storage facility prior to being sent to an archive facility (if any):**

Office of Response and Restoration - Silver Spring, MD

**8.3. Approximate delay between data collection and submission to an archive facility:****8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?**

*Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection*

**9. Additional Line Office or Staff Office Questions**

*Line and Staff Offices may extend this template by inserting additional questions in this section.*